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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/691,675

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Joe W. Duran

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EXAMINER

WERNER, DAVID N

ART UNIT

PAPER NUMBER

2621

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DELIVERY MODE

07/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/691,675	Applicant(s) DURAN ET AL.	
	Examiner David N. Werner	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-75 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 36-75 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20050627, 20051005, 20060202</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. This is the First Action on the Merits for US Patent Application 10/691,675, which is a continuation-in-part of US Patent Application 10/264,749, now US Patent 6,674,960, which is a continuation of US Patent Application 09/894,051, now US Patent 6,480,584, which is a continuation of US Patent Application 09/757,392, now US Patent 6,285,746 (INVALIDATED), which is a continuation of US Patent Application 09/490,905, now US Patent 6,181,784, which is a continuation of US Patent Application 08/425,729, now abandoned, which is a continuation of US Patent Application 08/158,045; now abandoned, which is a continuation of US Patent 07/703,685, now abandoned. Currently, claims 36-75 are pending. Claims 1-35 were cancelled in preliminary amendments.

Information Disclosure Statement

2. The information disclosure statement filed 02 February 2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; **each non-patent literature publication or that portion which caused it to be listed;** and all other information or that portion which caused it to be listed (emphasis added). It has been placed in the application file, but the non-patent literature referred to therein has not been considered.
3. The information disclosure statement filed 02 February 2006 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance,

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as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Drawings

4. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The abstract of the disclosure filed in the preliminary amendment of 28 July 2005 does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Claim Objections

6. Applicant is advised that should claim 62 be found allowable, claim 61 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

7. Applicant is advised that should claims 55-60 be found allowable, claims 69-74 will be objected to under 37 CFR 1.75 as being substantial duplicates thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Double Patenting

8. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states, "whoever invents or discovers any new and useful process ... may obtain a patent therefor..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

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9. Claims 36 and 37 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 3 of prior U.S. Patent No. 6,285,746 B1. This is a double patenting rejection.

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claim 75 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,285,746 B1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the video processing device of claim 1 of the prior patent is designed to perform the method of claim 75 of the present application. The video and audio memory buffers accept a multimedia stream, the communication bus routes the stream to the mass storage device for recording, and the mass storage device are

extracted to a video display and audio playback unit while a different video and audio signal is routed to the mass storage device for recording.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 36-43, 45-47, and 49-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4,682,248 (Schwartz) in view of US Patent 4,972,396 (Rafner). Schwartz teaches a computerized digital video recorder. Regarding claim 36, figures 8 and 8A show an embodiment of the recorder of Schwartz. This recorder includes a central processing unit, a RAM buffer coupled to a video connector (that is, a video buffer), a RAM buffer coupled to an audio connector (that is, an audio buffer), and a disk drive. The connecting line shown between the CPU and the RAM buffers is then a bus. At playback time, encoded video and audio signals stored on the disk drive are sent to the buffers, converted from digital to analog format, and outputted on a display (column 17, lines 23-45). However, while Schwartz indicates a time-shifted video and audio playback, it does not disclose playback during storage of further video and audio signals.

Rafner discloses a video recording system featuring a multiple-head recording disc. Regarding claim 36, figure 8 shows an embodiment of the system of Rafner.

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Processing apparatus 202, corresponding with the communications processor of the current invention, controls the processes of receiving information from external input sources through a receiver and sending information to an output device. Since the disc of Rafner has multiple recording heads, one head may be receiving data independently of another head outputting data (column 6, lines 13-22). Regarding claim 37, a viewer watching a recorded program on the system of Rafner could begin viewing the program a delayed time after recording starts (column 4, lines 62-66).

Schwartz discloses the claimed invention except for independently storing a set of audio/video signals and playing back a different set of audio/video signals. Rafner teaches that it was known to provide a recording disc with multiple heads to facilitate independent record and playback options. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the multiple-head disc of Rafner as the disc drive of Schwartz, since Rafner states in column 2, lines 9-12 that such a modification would enable reading, writing, and editing multiple streams of data simultaneously.

Regarding claim 38, figure 1 of Schwartz shows Data Acquisition Module (DAM), which accepts an input signal (column 6, lines 28-65), corresponding to the input interface of the present invention, and Player Module, which produces an output signal (column 9, lines 1-3), corresponding to the output interface of the present invention. Regarding claim 39, again, a viewer watching a recorded program on the system of Rafner could begin viewing the program a delayed time after recording starts. Regarding claim 40, Schwartz operates on many types of signals, including audio and

video (abstract). Regarding claim 41, Schwartz operates on a "microcomputer" (column 5, line 61), for which many RISC architectures were known at the time of the invention, such as SPARC or MIPS. Regarding claim 42, Schwartz may be assembled from "off-the-shelf" standard IC components (column 9, lines 30-32). Regarding claim 43, again, Schwartz stores video and audio signals on a disk drive. Regarding claim 45, Schwartz may output to a television (column 17, line 39). Regarding claim 46, Rafner discloses the use of a multi-head recording disc as a buffer for digital video transmission over an ISDN H-channel (column 6, lines 50-68). Regarding claim 47, the system of Schwartz may be built with VLSI technology in several IC chips (column 9, lines 27-30).

Regarding claim 49, figure 1 of Schwartz shows a 2.6 MB/s input bus from the DAM to a RAM buffer module, and a 1.3 MB/s output bus from the RAM buffer module to a player module. Regarding claim 50, again, Schwartz operates on many types of signals, including audio and video. Regarding claim 51, again, Schwartz may be assembled from "off-the-shelf" standard IC components. Regarding claim 52, again, Schwartz stores video and audio signals on a disk drive. Regarding claim 53, again, Rafner discloses the use of a multi-head recording disc as a buffer for digital video transmission over an ISDN H-channel.

Regarding claims 54, 55, 61, 62, and 69, in Schwartz, Disk Read/Write module records data into the disk storage and reads from the disk at playback (column 8, lines 51-68). This corresponds with the "co-processor" of claim 54, the "multimedia stream routing means" of claim 55 and claim 69, the "logic circuit" of claim 61, and the "communications processor" of claim 62. Regarding claim 56 and claim 70, figure 1 of

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Schwartz shows input signals going to the disc storage through the read/write module via the DAM, the RAM buffer module, the WAC, and the DRA, and output signals going to the player module through the read/write module through the RAM buffer module.

Regarding claim 57 and claim 71, like other components of Schwartz, this may be implemented with standard IC components or as a custom VLSI chip (column 9, lines 27-32). Regarding claim 58 and claim 72, figure 5 of Schwartz shows a disk controller and a disk drive coupled to a microcomputer, which were well known at the time of the invention to include a CPU and a memory. Regarding claim 59 and claim 73, figure 1 of Schwartz shows "DISK STORAGE" device. Regarding claim 60 and claim 74, the disc storage device has a worst-case access time of 0.5 seconds for any point in the disc, and so is considered random-access for the purpose of jumping between cuts on a recorded program (column 14, lines 56-64). Regarding claim 63, again, in Rafner, a recorded program may be played back at a delay from recording.

Regarding claim 64, in Rafner, processing apparatus 202 controls the sending and receiving information to and from disc 200 and various input and output devices (column 6, lines 9-19). This corresponds with the processor circuitry of claim 64.

Regarding claim 65, again, Rafner teaches playing back a recorded program at a delay after recording the program. Regarding claim 66, Rafner may record or read different programs simultaneously (column 5, lines 2-4). Regarding claim 67, the invention of Rafner is an optical disk system (abstract). Regarding claim 68, again, Rafner discloses receiving video over an ISDN H-channel.

Regarding claim 75, the apparatus of Schwartz is capable of performing the steps of accepting a multimedia stream, routing the multimedia stream to a storage device, and extracting the recorded multimedia stream from the storage device, and the apparatus of Rafner is capable of performing the step of extracting a recorded multimedia stream from a storage device while a different multimedia stream is being routed to the storage device.

14. Claims 44 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz in view of Rafner as applied to claim 38 above, and further in view of "New Video Coding Standard for the 1990s" (Carr). Schwartz discloses various methods of video compression, such as the Fast Fourier Transform and the Fast Delta Hadamard Transform. However, Schwartz does not disclose a DCT transform or motion estimation. Carr describes the H.261 video-coding standard, developed in 1990 for teleconferencing. Regarding claim 44, H.261 was known to incorporate a DCT transform (pg. 121, column 1), and regarding claim 48, H.261 was known to incorporate motion compensation (pg. 121, column 3).

Schwartz, in combination with Rafner, discloses the claimed invention except for details of video encoding. Carr teaches that it was known to incorporate H.261 video coding and decoding in a video recording system. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to encode video s as H.261 as taught by Carr, since Carr states in page 120, column 3,

that such a modification would enable video to be transmitted over a 64 kb/s transmission line.

Conclusion

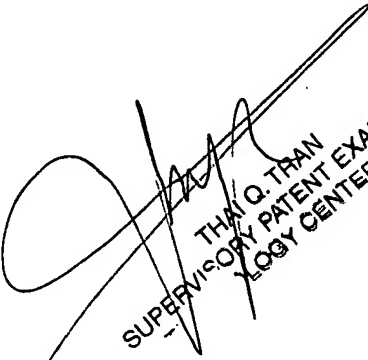
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Forgent Networks v. EchoStar Communications* shows that parent patent 6,285,746 has been invalidated.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David N. Werner whose telephone number is (571) 272-9662. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DNW


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